

HM 163.73

Sediment feeder



The illustration shows the sediment feeder on the platform.

Description

- sediment feed using a vibrating conveyor
- operation via touch screen in HM 163

The sediment feeder essentially consists of a vibrating conveyor, via which sediment is introduced into the experimental section. The feeder is usually mounted above the inlet to the experimental section. The sediment used is sand with a grain size of 1...2mm.

The feeder is mounted on a walk-on platform that is installed next to the experimental flume. An advantage of the separate platform is that the feeder vibrations do not affect the experimental section. The accessory is automatically identified by the PLC. The feeder is operated and the vibration intensity is set via the touch screen of the HM 163 PLC.

HM 162.73 is not suitable for suspended load transport.

HM 163.73 is used together with the sediment trap HM 163.72.

Learning objectives/experiments

- observation of bed-load transport along the flume bottom
 - ▶ rolling and saltation bed-load transport
- formation and migration of ripples and dunes
- together with HM 163.29 or HM 163.46
 - ▶ fluvial obstacle marks

Specification

- [1] sediment feeder for a sediment feed to the experimental flume HM 163
- [2] accessory for the sediment trap HM 163.72
- [3] automatic identification of the accessory in the PLC
- [4] mounting above the inlet of the experimental section of HM 163
- [5] walk-on platform for the feeder
- [6] operation via touch screen of the PLC in HM 163

Technical data

Feeder

- feed rate: 0,5m³/h
- frequency: 3600min⁻¹

Funnel content: 50L

Height of the platform: approx. 1900mm

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase

120V, 60Hz, 1 phase

UL/CSA optional

LxWxH: 1500x500x1050mm (feeder)

Weight: approx. 250kg (feeder)

LxWxH: 3800x1700x2900mm (platform)

Weight: approx. 450kg (platform)

Required for operation

sediment: sand (1...2mm grain size)

Scope of delivery

- 1 feeder
- 1 platform
- 1 set of accessories
- 1 manual

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Required accessories

HM 163	Experimental flume 409x500mm
HM 163.72	Sediment trap

Optional accessories

HM 163.29	Sluice gate
HM 163.46	Set of piers, seven profiles